1: Nadel E-5 (1934-1936) 1942
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mined and smelted in the country. The production of native iron ore has been greatly reduced in recent years. To-day a large proportion of the crude iron is bought from the European stores—the Nupe call it *kansana*, 'dry iron', to distinguish it from the native mined *nyenkpa žiko*, 'black iron'. The competition of cheap European iron has made the upkeep of the large native foundries unprofitable; many have been abandoned and allowed to fall in disuse, and even where they are still in use only two or three out of perhaps six furnaces are still workable. But in the busy season, shortly before the rains, when everybody needs hoes and axes, the supply of European iron frequently runs out, and the resulting shortage has to be relieved by calling on the supplies of native-mined iron ore. Nupe iron-smelting can, in fact, no longer meet heavier or more regular demands, although many Nupe farmers still prefer a hoe made of native-mined iron—it is stronger, and lasts better, they say; European iron is fit only for repairs, for patching hoe-blades, &c. The tools of the blacksmiths and, above all, the anvil, are invariably made of native-mined iron.

The iron-ore miners, called *edudaciži* (meaning 'workers in the deep'), form a professional group distinct from the blacksmiths, although some of them are blacksmiths as well as iron-ore miners. The mining is done on the slopes of the low flat-topped ferriferous hills of the country. I have heard of five different mining places: near Mokwa, near Shari, near Patigi, near Kutigi, and near Pichi (about 8 miles from Bida). I have seen only two; one in work, though on a reduced scale (near Pichi), and one abandoned (near Shari). The iron-ore foundry near Pichi is the largest in existence. Like the blacksmith groups in the districts round Bida the iron-ore miners of Pichi submit to the authority of the guild-head of the blacksmiths in Bida. His authority goes so far that, five years ago, he could order two additional furnaces to be built in order to increase the Bida supply of iron ore; these new furnaces, however, are no longer in use.

The ore is scratched off the surface of the hill or dug out of shallow pits. Close to the hill-side are the furnaces in which the iron ore is smelted. Three furnaces are placed side by side under a large grass roof which protects workers and 'machinery' from sun and rain. It will be best to describe the very elaborate arrangement by means of two diagrams, the first of which represents a bird's-eye view of the furnaces, and the second a vertical section through a furnace. We have first, a large pit, 6 feet square and 6 feet deep. On one side a pot for water is let in the ground; on the other the furnace proper is erected. It consists, above ground, of a kind of chimney (*a*) made of thick clay, 5 feet high, built over the mouth of an airshaft (*b*) which serves both as ventilator and as opening for the fuel and the iron ore. On the other side of the chimney are the two bellows (*c*), clay tubes formed somewhat like horns, the wide mouth of which is covered with goatskin. The narrow bottom ends of the bellows tubes are joined, under ground, with a long straight clay tube (*d*), a little over 5 feet long, which is fixed in position by means of wooden wedges. It opens into a cave-like space which forms an extension of the square pit. On the bottom of this space the iron ore is

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attitude has still survived: when I trekked through the country round Sakpe in 1936 I found myself in the same predicament, and although it was in the dry season and farming was at a standstill, I had eventually to agree to women carrying my loads as men were not available for this task. That the appeal of paid labour as a seasonal occupation for peasants is rapidly gaining ground cannot be doubted. The stopgap occupation can, in fact, be said to satisfy a definite want in present-day peasant economy.[1] The strength of its appeal still varies greatly locally. The large majority of the peasants whom I found employed as labourers in the construction of Badeggi bridge were local men or men from the neighbourhood of Bida. Of 19 labourers 14 came from Badeggi itself, 3 from hamlets near Bida, 1 from Kacha, 1 from a village farther afield (Jima), and none from Trans-Kaduna. The local selection does not merely reflect varying degrees of progressiveness or 'sophistication'; it also reflects the varying urgency of the wants for the relief of which paid labour is undertaken. The nature of these wants we shall discuss in detail later.

[1] To-day many Nupe peasants are ready to try any kind of paid labour, but will abandon it quickly if it falls short of their expectations of a regular and substantial income. Thus the Nupe of Leaba tried their luck in gold-washing, which is carried out on a considerable scale in that district. They had heard from Hausa labourers that one could make as much as 9*d*. or 1*s*. a day in this work. They had not realized, however, that the payment was not per day, but depended on the amount of gold which the individual worker can produce. As the Nupe were rather clumsy and slow, unlike the experienced Hausa labourers, their pay was small and irregular, and, gravely disappointed, they soon gave up gold-washing.